REMARKS/ARGUMENT

Applicant acknowledges receipt of the Examiner's communication dated December 19, 2007.

I. Claim Objections

The Examiner objected to several of the claims on the basis of informalities. The objections have been considered and have been addressed as provided in the listing of claims beginning on page 2 herein.

II. Claim Rejections – 35 USC §112

The Examiner has objected to claim 1 as being indefinite for inadequately describing the relationship between "using a model of the body part" and "obtain[ing] a baseline electrical property". The Applicant respectfully submits that claim 1 is not indefinite and that the relationship is sufficiently described. As stated in paragraph 25, "a numerical or physical model of a baseline ... body part [is used] to compute baseline values". Paragraphs 30 to 34 explain several different ways in which a model can be used to obtain baseline values. In addition claims 7 to 9 recite several different ways in which the baseline property can be obtained from a model.

III. Claim Rejections – 35 USC §103

The Examiner has rejected claims 1-21 as being unpatentable over Shmulewitz et al. in view of Clay et al. and Jersey-Willuhn et al. Applicant disagrees for the following reasons.

Independent claim 1 of the present application recites a method for diagnosing the possibility of disease in a body part, the method including, *inter alia:*

representing the body part with a grid having a plurality of finite elements;

using a model of the body part to obtain a baseline electrical property associated with each of the plurality of finite elements for each of a plurality of current injections obtained with an electrode array;

calculating a set of weights associated with a particular one of the plurality of finite elements, the set of weights consisting of a plurality of weight factors wherein each of the plurality of weight factors is associated with each of the plurality of current injections and wherein each of the plurality of weight factors is determined based on current density in the particular one of the plurality of finite elements;

None of the cited references disclose the use of a grid to represent a body part. For example, although the Examiner has cited Shmulewitz et al. for this purpose, that reference fails to teach this element. Specifically, the "segments" to which the Examiner has pointed refer to "Fluid chambers" such as aorta and arterial segments (see col. 6, lines 60-61). These are not elements on a grid. In stead, these are irregular volumes or chambers through which blood flow. There is no similarity between examining the various physical chambers of the body and representing the body part with a grid. Therefore, neither Shmulewitz et al. do not teach or suggest this claimed element.

In addition, none of the cited references teach calculating weights consisting of a plurality of weight factors. The Examiner has cited Shmulewitz et al. for this purpose. However, as can be seen at column 6, lines 58-60, the weights mentioned are obtained based on "a priori knowledge of the relative distribution of flow..." Therefore, unlike claim 1, this reference does not teach calculating weights.

Furthermore, claim 1 recites that "the set of weights consist of a plurality of weight factors" and that "the plurality of weight factors is determined based on current density". In contrast, Shmulewitz et al. do not disclose the use of weight factors. Moreover, Shmulewitz et al. do not disclose that any weights or weight factors are in any way determined by current density. More specifically, column 6, lines 58-64 indicate that the weights are associated with blood flow and not current density. Therefore,

neither this reference nor any other cited reference teach or suggest these aspects of claim 1.

In addition, Shmulewitz et al. not only fail to teach the use of weights in the manner recited by claim 1 they actually teach away from using any weights at all. Specifically, column 6, line 65 to column 7, line 2 reads as follows:

Applicant has discovered, however, that equation (1) may be used accurately for any patient provided that the transfer function T(t) is correlated to measured blood flow (e.g., using a flow meter) so that the effect of the distribution weights W, can be essentially eliminated [emphasis added].

As can be seen from the above quoted text, Shmulewitz et al. teach a method that avoids the use of any weights. The Applicant respectfully notes that the equation referred to in the above quoted section does not contain any weights. Thus, this reference does not teaches calculating the weights, it does not teach that the weights are determined based on current density, it does not actually teach the use of the weights, and in fact, it actually teaches against using the weights. For at least these reasons, it cannot be said that this reference would lead a person skilled in the art to the use of this aspect of the claim 1.

Furthermore, nothing in Clay et al. appears to disclose the use of a model. The sections cited by the Examiner appear to disclose several equations. However, none of these equations appear to amount to a model of a body part. Moreover, none of these equations appear to be used to obtain baseline values.

In addition Jersey Willuhn et al. do not teach, suggest, or imply the subject matter recited by claim 1. Specifically, that reference does not teach a method of diagnosing a possibility of disease in a body part including representing a body part with a grid having a plurality of finite elements, and using a model of the body part to obtain a baseline electrical property associated with each of a plurality of current injections obtained with

an electrode array. It also does not teach calculating a set of weights, calculating a diagnostic where the diagnostic is a sum that includes the weight factors multiplied by a ratio of measure electrical property, or using the diagnostic to diagnose the possibility of disease where a higher the value of the sum of the diagnostic represents a higher possibility of disease.
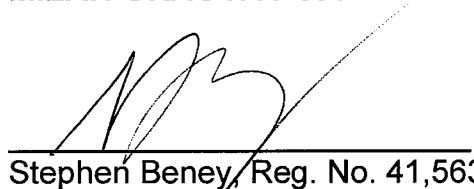
Conclusion

For the foregoing reasons, it is respectfully submitted that Shmulewitz et al. in view of Clay et al. and Jersey-Willuhn et al., whether taken singly or in any combination, do not teach, suggest or imply the subject matter of the present invention as claimed in claim 1. It is further respectfully submitted that for the foregoing reasons, the remaining claims, which all ultimately depend from claim 1, clear the art cited.

In light of the above arguments, the Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Should the Examiner have any further questions, comments or concerns related to this case and for which the Examiner deems a telephone call may expedite prosecution, the Examiner is invited to contact the undersigned at (416) 957-1697.

Respectfully submitted,

MILAN GRAOVAC et al.

Stephen Beney/Reg. No. 41,563
Bereskin & Parr, Customer No. 001059
Tel: (416) 957-1697